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PPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,670 03/31/2004		03/31/2004	Young-Nam Hwang	5649-1288	8320
20792	7590	06/17/2005		EXAMINER	
MYERS E		BLEY & SAJOVEO	TRAN, LONG K		
RALEIGH,		27		ART UNIT	PAPER NUMBER
,				2818	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
			<b>V</b>
Office Action Summary	10/814,670	HWANG ET AL.	
Office Action Guillinary	Examiner	Art Unit	
The MAILING DATE of this accommissation on	Long K. Tran	2818	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	ith the correspondence addre	ess
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ly within the statutory minimum of thi will apply and will expire SIX (6) MOI e, cause the application to become A	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this comn  BANDONED (35 U.S.C. § 133).	nunication.
Status			
1)⊠ Responsive to communication(s) filed on 31 / N	March 2004		
	s action is non-final.		
3) Since this application is in condition for allowated closed in accordance with the practice under	nce except for formal mat	• •	nerits is
Disposition of Claims			
4) ⊠ Claim(s) <u>1 - 33</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) <u>1 - 33</u> are subject to restriction and/or	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examina  10) The drawing(s) filed on is/are: a) accomposed and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the oath or declaration is objected to by the E	cepted or b) objected to drawing(s) be held in abeya ction is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR	, ,
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in A prity documents have beer tu (PCT Rule 17.2(a)).	Application No  received in this National Sta	age
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No	Summary (PTO-413) s)/Mail Date Informal Patent Application (PTO-15	52)

## **Election/Restrictions**

Claims 1 – 33 are pending in this application.

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

**Group I.** Claims 1 – 20, drawn to a semiconductor device, classified in class 257, subclass 295.

**Group II.** Claims **22** – **33**, drawn to process of making a semiconductor device, classified in class **438**, subclass **3**.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of following can be shown: (1) that the process as claimed can be use to make other and materially different product or by hand, or (2) that process as claimed can be made by another and materially different process. (MPEP § 806.05(f)). In the instance case unpatentabilities of the group I invention would not necessarily imply unpatentability of the group II invention, since the device of the group I invention could be made by the processes materially different from those of the group II invention, for example in claim 30, forming a first insulation layer having openings on a semiconductor layer using a mask in order to alleviate the need for subsequent etching the first insulation layer.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, the fields of search are not co-extensive. Therefore, separate examination would be required and restriction for examination purposes as indicated is proper.

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4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventor-ship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventor-ship must be accompanied by a diligently filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long K. Tran whose telephone number is 571-272-1797. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**LKT** 

June 14, 2005

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